Monthly Progress Report

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Pursuant to: RCRA I-88-1088

Facility Site: Cranston, RI

Period Covered: May 1993 (24 April 1993 – 28 May 1993)*

Date Submitted: 10 June 1993

1.0 SUMMARY

This is the thirty-fifth monthly progress report. Four significant events occurred this month.

Stabilization Investigation. Demobilization of the pilot pretreatment system continued. TCLP analytical results were received from the CIBA-GEIGY Environmental Testing Laboratory (ETL) for carbon sampled from the carbon canister of the pilot pretreatment system; the results (presented in Attachment A) indicated that the carbon was non-hazardous. The adsorbate profile document (i.e., the profile of the influent stream to the carbon canister) was submitted, along with a carbon sample, to Calgon Carbon Corporation for reactivation testing.

Project Management. The Stabilization Investigation Report and Design Concepts Proposal was submitted to the USEPA on schedule (5/3/93). On 5/6/93, a meeting was held with personnel from CIBA-GEIGY and Woodward-Clyde Consultants to begin developing the conceptual design and basis of design for the full-scale stabilization actions proposed for the Production Area. Additional work on the selection of indicator and target compounds continued. A teleconference call was held with personnel from the USEPA, CIBA-GEIGY, IT Corporation, and Woodward-Clyde Consultants on 4/30/93 to discuss issues about the risk assessment and the selection of indicator/target compounds. On 5/5/93, personnel from the USEPA visited the site to evaluate the locations of the background monitoring wells proposed in the Phase II Proposal. Draft comments on the Phase I Interim Report and Phase II Proposal were received in a letter from the USEPA on 5/6/93. Review of the draft comments began. Teleconference calls were held with personnel from the USEPA, CIBA-GEIGY, IT Corporation, and Woodward-Clyde Consultants on 5/7/93 to discuss issues (in the draft comments) about the selection of indicator/target compounds, and on 5/27/93 to discuss the draft comments on the ecological risk assessments. Teleconference calls also were held with personnel from the USEPA and Woodward-Clyde Consultants on 5/12/93 and 5/13/93, and with CIBA-GEIGY personnel on 5/19/93, to discuss general aspects of the USEPA comments. An additional teleconference call was held with personnel from the USEPA, CIBA-GEIGY, and Woodward-Clyde Consultants on 5/28/93 to discuss the draft comments on hydrogeological issues in the report.

*As agreed, the reporting period will be monthly through the fourth Friday of the month.

Water Level Monitoring. Monthly groundwater level monitoring continued. Processing groundwater level data from the automatic recorders (transducers) continued.

Hydrological Investigation. Stage height measurements of the river continued. Processing river stage data from the automatic recorders (transducers) continued.

2.0 TASKS AND ACTIVITIES COMPLETED

The sampling and other activities (subtasks) that were completed are reported here.

2.1 Sampling Activities Completed

No sampling was performed during this reporting period.

2.2 Other Activities Completed

The other activities (subtasks) completed during this reporting period were described in Section 1.0.

3.0 JEOPARDY TASKS (scheduled tasks not completed)

No tasks were in jeopardy as of 28 May 1993.

4.0 OTHER TASKS UNDERWAY (and on schedule)

The tasks that were underway (and on schedule as of 28 May 1993) were described in Section 1.0.

5.0 DATA OBTAINED

Groundwater level data have been obtained but have not yet been peer reviewed. Continuous groundwater level data from the automatic recorders (transducers) were downloaded but have not yet been processed. Stage height measurements of the river were obtained but have not yet been reviewed. Analytical results for carbon sampled from the carbon canister for TCLP analysis performed by the CIBA-GEIGY ETL were received; the results indicated that the carbon was non-hazardous. Reactive cyanide results on the carbon sample were received from the CIBA-GEIGY ETL (completing the analyses required for the sample).

6.0 PROBLEM AREAS

The resolved, new, potential (i.e., anticipated or possible), and outstanding (i.e., still unresolved) problem areas are reported here.

6.1 Resolved Problem Areas

One problem area was discovered and resolved during the reporting period.

Data Loggers Inoperative

Problem. During measurements of groundwater levels, two of the data loggers were found to be inoperative. These data loggers (in monitoring wells MW-1S and MW-1D) were removed for repair.

Resolution. The data logger from MW-1S was re-installed and re-started. The data logger from MW-1D was sent back to the manufacturer for repair. A replacement will be installed during the next round of water level measurements.

6.2 New Problem Areas

No new problem areas remained unresolved during this reporting period.

6.3 Potential Problem Areas

No potential problem areas were identified during this reporting period.

6.4 Outstanding Problem Areas

No problem areas remained unresolved during this reporting period.

7.0 SCHEDULE OF TASKS (next two months)

The projected schedule is provided here. It covers the tasks to be performed in the next two months (June and July 1993), along with other comments or considerations.

Target Date	Task#	Task	Comments/Considerations
ongoing	—	Stabilization	
ongoing	9	Project Management	
ongoing	10	Data Management	
ongoing	11	Project Administration	
ongoing	12	Quality Assurance	
ongoing	13	Health & Safety Assurance	

8.0 CHANGES IN WORK PLAN

No changes were made to the Work Plan during this reporting period.

9.0 OTHER COMMENTS

The plans going forward into June and July include:

- revising the Phase I Interim Report and Phase II Proposal, and
- additional planning for future investigations.

The following document is appended:

- Attachment A — TCLP Analytical Results for Carbon Samples Collected from the Carbon Canister in the Pilot Groundwater Pretreatment System

ATTACHMENT A

TCLP Analytical Results for Carbon Samples Collected from the Carbon Canister in the Pilot Groundwater Pretreatment System

CIBA-GEIGY Facility
Cranston, Rhode Island

EPORT NUMBER: 93E-0211

28-Apr-93

Ciba-Geigy Corporation

ENVIRONMENTAL TESTING LABORATORY

Laboratory Chronicle

Sample #	Sample Description	Date Sampled	Date Received
93040116	CRBN-TCLP	3/30/1993	4/01/1993

Sample #	Sample Description	Parameter	Date Extracted
93040116	CRBN-TCLP	Semivolatiles-TCLP	4/12/1993
		TCLP Volatiles	4/05/1993
		TCLP Semivolatiles	4/05/1993
		TCLP Metals	4/05/1993
		Semivolatiles-TCLP	4/16/1993

Sample #	Sample Description	Parameter	Date Analyzed
93040116	CRBN-TCLP	Volatiles	4/07/1993
		Semivolatiles	4/22/1993
		Total Mercury TCLP	4/20/1993
		Total Barium TCLP	4/19/1993
		Total Cadmium TCLP	4/19/1993
		Total Chromium TCLP	4/19/1993
		Total Silver TCLP	4/16/1993
		Total Arsenic TCLP	4/15/1993
		Total Lead TCLP	4/15/1993
		Total Selenium TCLP	4/15/1993
		Percent Solids	4/06/1993

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28-Apr-93

Ciba-Geigy Corporation
ENVIRONMENTAL TESTING LABORATORY

Definitions

N/A	Not applicable
ND	Not detected at or above method detection limit.
J	Detected but below method detection limit.
B	Analyte detected in blank but not corrected for amount in blank.
Method Detection Limit	Lowest concentration (amount) that must be present before a reliable and recognizable response is observed for that method of analysis. When a sample has been diluted, the Method Detection Limit has been multiplied by the dilution factor.

Methodology

TCLP extracts were prepared in accordance with Toxicity Characteristics Revisions; Final Rule, 40 CFR 261, March 29, 1990.

Volatile organic analyses were performed in accordance with Method 8240, SW-846, EPA Test Methods for Evaluating Solid Wastes, 3rd edition.

Semivolatile organic analyses were performed in accordance with Method 8270, SW-846, EPA Test Methods for Evaluating Solid Wastes, 3rd edition.

ICP metals analyses were performed in accordance with Method 200.7, 40 CFR 136.

Furnace metals and inorganics analyses were performed in accordance with EPA Test Methods for the Chemical Analysis of Water and Wastes.

Nonconformance Summary

The semivolatile fraction for sample 93040116 failed QC Criteria for all acid surrogates. It was reextracted outside the regulatory hold time and reanalyzed. The reanalysis is reported.

CIBA–GEIGY CORPORATION

ENVIRONMENTAL TESTING LABORATORY

TCLP REGULATORY LEVELS

PARAMETER	MAXIMUM CONC. LIMITS
Vinyl chloride	200
1,1–Dichloroethene	700
2–Butanone	200000
Chloroform	6000
Carbon tetrachloride	500
1,2 Dichloroethane	500
Trichloroethene	500
Benzene	500
Tetrachloroethene	700
Chlorobenzene	100000
1,4–Dichlorobenzene	7500
Total Cresols	200000
Hexachloroethane	3000
Nitrobenzene	2000
Hexachlorobutadiene	500
2,4,6–Trichlorophenol	2000
2,4,5–Trichlorophenol	400000
2,4–Dinitrotoluene	130
Hexachlorobenzene	130
Pentachlorophenol	100000
Pyridine	5000
Gamma BHC (Lindane)	400
Chlordane	30
Endrin	20
Heptachlor	8.0
Heptachlor Epoxide	8.0
Toxaphene	500
Methoxychlor	10000
2,4–D	10000
2,4,5–TP(Silvex)	1000
Barium	100000
Cadmium	1000
Chromium	5000
Arsenic	5000
Lead	5000
Selenium	1000
Silver	5000
Mercury	200
	(ug/L)

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Volatiles

CRBN-TCLP Parameter	93040116	Method Detection Limit	Units
1,1-Dichloroethene	ND	50	ug/L
1,2-Dichloroethane	ND	50	ug/L
2-Butanone	ND	1000	ug/L
Benzene	ND	50	ug/L
Carbon tetrachloride	ND	50	ug/L
Chlorobenzene	ND	50	ug/L
Chloroform	ND	50	ug/L
Tetrachloroethene	ND	50	ug/L
Trichloroethene	ND	50	ug/L
Vinyl chloride	ND	100	ug/L

Semivolatiles

CRBN-TCLP Parameter	93040116	Method Detection Limit	Units
1,4-Dichlorobenzene	ND	40	ug/L
2,4,5-Trichlorophenol	ND	40	ug/L
2,4,6-Trichlorophenol	ND	40	ug/L
2,4-Dinitrotoluene	ND	40	ug/L
Hexachlorobenzene	ND	40	ug/L
Hexachlorobutadiene	ND	40	ug/L
Hexachloroethane	ND	40	ug/L
Nitrobenzene	ND	40	ug/L
Pentachlorophenol	ND	200	ug/L
Pyridine	ND	80	ug/L
Total Cresol	ND	40	ug/L

REPORT NUMBER: 93E-0211-Rev. 10-May-93

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Metals

CRBN-TCLP Parameter	93040116	Method Detection Limit	Units
Total Arsenic	ND	160	ug/L
Total Barium	650	50	ug/L
Total Cadmium	ND	75	ug/L
Total Chromium	ND	1000	ug/L
Total Lead	ND	46	ug/L
Total Mercury	ND	47	ug/L
Total Selenium	ND	90	ug/L
Total Silver	ND	12	ug/L

Traditional Parameters

CRBN-TCLP Parameter	93040116	Method Detection Limit	Units
% Solids	47	N/A	%w/w
pH	8.8	N/A	S.U.
Reactive Cyanide	ND	2.1	mg/Kg
Reactive Sulfide	ND	2.1	mg/Kg
Ignitability	>60	N/A	°C

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Ciba-Geigy Corporation
ENVIRONMENTAL TESTING LABORATORY

Volatiles

TCLP BLANK Parameter	93040325	Method Detection Limit	Units
1,1-Dichloroethene	ND	50	ug/L
1,2-Dichloroethane	ND	50	ug/L
2-Butanone	ND	1000	ug/L
Benzene	ND	50	ug/L
Carbon tetrachloride	ND	50	ug/L
Chlorobenzene	ND	50	ug/L
Chloroform	ND	50	ug/L
Tetrachloroethene	ND	50	ug/L
Trichloroethene	ND	50	ug/L
Vinyl chloride	ND	100	ug/L

Semivolatiles

TCLP BLANK Parameter	93040325	Method Detection Limit	Units
1,4-Dichlorobenzene	ND	40	ug/L
2,4,5-Trichlorophenol	ND	40	ug/L
2,4,6-Trichlorophenol	ND	40	ug/L
2,4-Dinitrotoluene	ND	40	ug/L
Hexachlorobenzene	ND	40	ug/L
Hexachlorobutadiene	ND	40	ug/L
Hexachloroethane	ND	40	ug/L
Nitrobenzene	ND	40	ug/L
Pentachlorophenol	ND	200	ug/L
Pyridine	ND	80	ug/L
Total Cresol	ND	40	ug/L

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28-Apr-93

Ciba-Geigy Corporation

ENVIRONMENTAL TESTING LABORATORY

Metals

TCLP BLANK

Parameter	93040325	Method Detection Limit	Units
Total Arsenic	ND	160	ug/L
Total Barium	230	13	ug/L
Total Cadmium	ND	20	ug/L
Total Chromium	ND	85	ug/L
Total Lead	ND	46	ug/L
Total Mercury	ND	47	ug/L
Total Selenium	ND	90	ug/L
Total Silver	ND	12	ug/L

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Surrogates

TCLP BLANK 93040325		
Parameter	% Recovery	QC Limits
,2-Dichloroethane-d4	98	76 to 114
oluene-d8	100	88 to 110
4-Bromofluorobenzene	100	86 to 115
2-Fluorophenol	49	21 to 100
Phenol-d6	55	10 to 94
Nitrobenzene-d5	61	35 to 114
2-Fluorobiphenyl	54	43 to 116
2,4,6-Tribromophenol	72	10 to 123
Terphenyl-d14	82	33 to 141
Dibutylchlorendate	125	24 to 154
2,4,5-T	87	30 to 128

CRBN-TCLP 93040116		
Parameter	% Recovery	QC Limits
1,2-Dichloroethane-d4	88	76 to 114
Toluene-d8	95	88 to 110
4-Bromofluorobenzene	100	86 to 115
2-Fluorophenol	19 *	21 to 100
Phenol-d6	27	10 to 94
Nitrobenzene-d5	52	35 to 114
2-Fluorobiphenyl	55	43 to 116
2,4,6-Tribromophenol	56	10 to 123
Terphenyl-d14	70	33 to 141

* Outside QC limits